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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/777,648	02/12/2004	James N. Chen	AUS920031053US1	5658

46240 7590 11/28/2005

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EXAMINER	
SUN, XIUQIN	

ART UNIT	PAPER NUMBER
2863	

DATE MAILED: 11/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

4:A

Office Action Summary	Application No.	Applicant(s)	
	10/777,648	CHEN, JAMES N.	
	Examiner	Art Unit	
	Xiuqin Sun	2863	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 September 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-19* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *12 February 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-5 and 7-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Zager et al. (U.S. Pat. No. 6393386).

With respect to claims 1 and 15:

Zager et al. teach a method and computer software that implements the method for monitoring a performance of a computing system (see Abstract), comprising: receiving data associated with monitoring performance of at least a portion of the computing device in accordance with a monitoring scheme (col. 5, lines 51-64; col. 13, lines 28-42; col. 16, lines 61-67; col. 17, lines 1-16 and col. 21, lines 11-22); detecting a pattern in the received data (col. 13, lines 44-50; col. 17, lines 65-67 and col. 18, lines 1-17); and autonomously adapting the monitoring scheme responsive to the likelihood of the correspondence of the detected pattern to a known pathology pattern (col. 13, lines 48-50).

With respect to claims 2-5 and 7-9:

The teaching of Zager et al. further includes: receiving data associated with monitoring performance of at least a portion of the computing system comprises receiving data associated with monitoring performance of a computing resource (col. 3, lines 22-47 and col. 5, lines 50-62); modifying the performance of the computing system in light of a predicted behavior associated with the pattern (col. 3, lines 41-46; col. 14, lines 51-67 and col. 15, lines 1-33); and detecting an unknown pattern while autonomously testing the received data (col. 15, lines 64-67 and col. 16, lines 1-8); notifying a user of the detection of the unknown pattern (col. 15, lines 64-67 and col. 16, lines 1-8); wherein autonomously testing the received data comprises applying an expert system to the received data (col. 21, lines 26-58); wherein autonomously adapting the monitoring scheme comprises at least one of varying a frequency of sampling, varying a metric for the computing resource, and monitoring the performance of the computing system with respect to another computing resource (col. 34, lines 15-67 and col. 35, lines 1-17); modifying the performance of the computing system based on a predicted behavior associated with the pattern (col. 13, lines 51-55; col. 14, lines 51-67 and col. 15, lines 1-33); autonomously adapting the monitoring scheme responsive to detecting the unknown pattern (col. 15, lines 64-67 and col. 16, lines 1-8).

With respect to claim 10:

Zager et al. teach an apparatus for monitoring a performance of a computing device (see Abstract), comprising: an interface (col. 8, lines 22-41); a control unit communicatively coupled to the interface (col. 3, lines 22-47), the control unit adapted to: receive data over the interface, the data being associated with monitoring

performance of at least a portion of the computing device in accordance with a monitoring scheme (col. 5, lines 51-64; col. 13, lines 28-42; col. 16, lines 61-67; col. 17, lines 1-16; and col. 21, lines 11-22); detect a pattern in the received data (col. 13, lines 44-50; col. 17, lines 65-67 and col. 18, lines 1-161); and autonomously adapt the monitoring scheme responsive to the likelihood of the correspondence of the detected pattern to a known pathology pattern (col. 13, lines 48-50).

With respect to claims 11-14 and 16-19:

The teaching of Zager et al. further includes: said control unit and software is adapted to receive data associated with monitoring performance of a computing resource (col. 3, lines 22-47); said control unit and software is further adapted to at least one of: establish the monitoring scheme (col. 3, lines 41-46; col. 14, lines 51-67 and col. 15, lines 1-33); modify the performance of the computing system in light of a predicted behavior associated with the pattern (col. 3, lines 41-46; col. 14, lines 51-67 and col. 15, lines 1-33); and detect an unknown pattern while autonomously testing the received data (col. 15, lines 64-67 and col. 16, lines 1-8); said control unit and software is further adapted to apply an expert system to the received data (col. 21, lines 26-58); said control unit and software is further adapted to at least one of vary a frequency of sampling, vary a metric for the computing resource, and monitor the performance of the computing system with respect to another computing resource (col. 34, lines 15-67 and col. 35, lines 1-17).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zager et al. (U.S. Pat. No. 6393386) in view of Sampath et al. (U.S. Pat. No. 6892317).

Zager et al. teach the method that includes the subject matter discussed above. Zager et al. do not mention expressly: wherein applying the expert system comprises applying a fuzzy logic system.

Sampath et al. disclose a system and method for failure prediction, diagnosis and remediation of electronic devices in a distributed network, and teach the step and means of applying a fuzzy logic system to monitoring data acquired from a plurality of electronic devices (col. 6, lines 17-38).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the teaching of Sampath et al. in the invention of Zager et al. in order to perform prediction and/or diagnostic analysis of the monitoring data that can be as rudimentary as machine operational status to highly complex data that could indicate a particular component failure or be used for future failure prediction analysis, or for scheduling of routine maintenance (Sampath et al., col. 1, lines 33-65).

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Response to Arguments

7. Applicant's arguments filed 09/22/05 have been fully considered but they are not persuasive.

Applicant argued that the cited art does not teach the limitation of "autonomously adapting the monitoring scheme responsive to the likelihood of the correspondence of the detected pattern to a known pathology pattern" recited in the amended independent claims 1, 10 and 15. This argument is not persuasive. The Examiner's position is that, given the claims the broadest reasonable interpretation, the cited Zager reference does read on the claims. The rejections stand.

Contact Information

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Xiuqin Sun whose telephone number is (571)272-2280. The examiner can normally be reached on 6:30am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on (571)272-2269. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Xiuqin Sun
Examiner
Art Unit 2863

XS
November 21, 2005

John Barlow
Supervisory Patent Examiner
Technology Center 2800